

## UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Jay A. Haines

Title:

INFRARED REFLECTIVE WALL

**PAINT** 

Appl. No.:

10/811,065

Filing Date:

3/26/2004

Examiner:

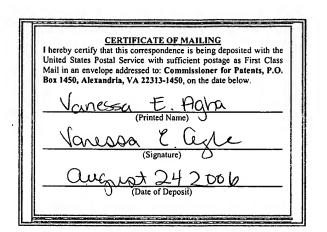
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Art Unit:

1762

Conf. No.:

8080



### **DECLARATION OF JULIE K. MOWERY UNDER 37 C.F.R. 1.132**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

I, Julie K. Mowery, being duly warned, hereby declare as follows:

- 1. I am a Certified Public Account serving as Chief Financial Office of Textured Coatings of America, Inc., 2422 East 15<sup>th</sup> Street, Panama City, FL 32405, which position I have held since 2002. Prior to joining Textured Coatings of America, Inc. I worked in public accounting for 13 years. I am familiar with the products sold by Textured Coatings of America, Inc., the historic and current costs and revenues associated with these products, and sales and revenues of related products of the architectural coatings industry in the United States.
- 2. Textured Coatings of America, Inc. manufactures the paints disclosed in the above-referenced patent application with brand name Supercote<sup>TM</sup>. In this declaration, the term "Supercote IR" refers to Supercote<sup>TM</sup> paint having the infrared (IR) reflective pigments described in the application, which pigments comprise a solid solution having a corundum-hematite crystal

lattice structure. The term "Supercote Non-IR" refers to Supercote™ paint which does not contain the infrared reflective pigment of the application.

3. I have analyzed the sales and pricing of Textured Coatings of America, Inc. related to Supercote<sup>TM</sup> in the time period 2000 through 2006. This analysis is provided as Exhibit 1. A summary of the analysis of Exhibit 1 is provided below:

Year		upercote S (Thousand		Sales Growth Supercote IR	Superco (\$	_	TexCote Sales (Thousand \$)
	Non-IR	IR	Total	(%)	Non-IR	IR	
2000	148.94		148.94		18.95		13,418.68
2001	139.93		139.93		18.95	····	12,752.78
2002	568.42		568.42		18.95		11,536.82
2003	295.69	1,312.99	1,608.68	183.0	18.95	24.95	13,527.71
2004		2,800.43	2,800.43	392.7		29.95	14,629.64
2005		3,240.09	3,240.09	470.0		30.95	15,393.21
2006		4,212.67	4,212.67	641.3		34.95	16,794.98

4. In the table above, the column entitled "Supercote Sales" provides sales data (i.e., total annual sales) for the period 2000-2006 for both Supercote Non-IR and Supercote IR. The term "Non-IR" refers to sales of Supercote Non-IR. The term "IR" refers to sales of Supercote IR.

The "Total" column provides the sum of Supercote Non-IR and Supercote IR sales. Supercote IR was introduced in 2003, and at that time Textured Coatings of America, Inc. discontinued the sale of Supercote Non-IR, except for the sale of product to complete ongoing projects.

Accordingly, all sales of Supercote™ subsequent to the introduction of Supercote IR in 2003 should be considered Supercote IR sales. Thus, the columns labeled "Non-IR" and "IR" represent sales prior and subsequent to the introduction of Supercote IR. The column labeled "Sales Growth" represents the annual growth in sales of Supercote IR. The column labeled "Sales Growth" represents the annual growth in sales of Supercote IR with respect to sales in 2002. The term "Supercote Price" refers to the manufacturer's suggested retail price per gallon for Supercote Non-IR and Supercote IR. Sales data for 2006 have been annualized based on

actual sales through June, 2006. The term "Texcote Sales" refers to total sales of Textured Coatings of America, Inc. All sales values are in thousands of dollars.

- 5. As shown in the table above, sales of Supercote<sup>TM</sup> increased by 2,729% in the period 2000-2006. In particular, sales of Supercote<sup>TM</sup> increased by 470% in the period 2002-2005, which period represents the time from the last full year in which Supercote Non-IR was marketed to the most recent full year (i.e., Supercote IR sales). Furthermore, sales of Supercote<sup>TM</sup> increased by 641.3% in the period 2002-2006, whereas total sales of Textured Coatings of America, Inc. increased by 45.6% (i.e., from \$11.536 million in 2002 to \$16.795 million in 2006).
- 6. The introduction of Supercote IR was accompanied by a pricing increase, from \$18.95/gal for Supercote Non-IR to \$24.95/gal for Supercote IR in 2003. In the period 2003-2006, pricing for Supercote IR increased from \$24.95/gal to \$34.95/gal; i.e., 40.0% increase in price. During the same 2003-2006 period, sales of Supercote<sup>TM</sup> have increased 261.9% (i.e., from \$1.608 million in 2003 to \$4.214 million in 2006.
- 7. I have analyzed the total amount (gallons) of Supercote™ paint sold by Textured Coatings of America, Inc. in the period 2000-2006. A summary of these data is provided in the Table following:

Year	Supercote Total Sold (Gallons)
2000	14,541
2001	18,060
2002	26,886
2003	53,358
2004	77,448
2005	92,080
2006	113,234

- 8. In the table above, the term "Supercote Total Sold (Gallons)" refers to total number of gallons of Supercote<sup>TM</sup>, including both Supercote Non-IR and Supercote IR, sold in the year. The figure for 2006 has been annualized. Supercote<sup>TM</sup> total gallons sold increased approximately 98.5% in 2003 over 2002, which increase in unit sales was the result of the introduction of Supercote IR in 2003. Furthermore, Supercote<sup>TM</sup> total gallons sold has increased 678.7% in the period 2000-2006, and 112.2% in the period 2003-2006, i.e., since the introduction of Supercote IR in 2003.
- 9. In order to establish annual values of the U.S. market for exterior water-type architectural coatings, which market encompasses the Supercote<sup>™</sup> brand, I have relied on data provided by the Economics and Statistics Administration of the U.S. Census Bureau; i.e., reports MA325F(02)-1, MA325F(03)-1, MA325F(04)-1, and MA325F(05)-1 for the period 2002-2005, respectively. Data for 2001 are also provided in the report for 2002, and have been used herein. Copies of these reports are provided herewith as Exhibits 2-5, respectively. A summary of these data is provided in the following table:

Year	Exterior water-type coatings (Million \$)	TCA Sales (Million \$)	TCA Sales (%)	Supercote Sales (Million \$)	Supercote Sales (%)
2001	1,369.898	12.752	0.931	0.140	0.010
2002	1,296.921	11.537	0.889	0.568	0.044
2003	1,295.764	13.528	1.044	1.609	0.124
2004	1,414.222	14.630	1.034	2.800	0.198
2005	1,418.266	15.393	1.085	3.240	0.228

10. In the table above, the term "Exterior water-type coating" refers to Produce code 3255101131 (Table 2) of Exhibits 2-5, which term reflect the total sales of all "Water thinned paints and tinting bases, including barn and roof paints" which are of the exterior water-type of architectural paints See Exhibits 2-5. The term "TCA Sales" refers to the total sales of Textured Coatings of America, Inc. The term "TCA Sales (%)" refers to the ratio of TCA Sales to exterior water-type coatings sales, expressed as a percentage. The term "Supercote Sales" refers to sales

of the Supercote<sup>™</sup> brand by Textured Coatings of America, Inc. The term "Supercote Sales (%)" refers to the ratio of Supercote Sales to exterior water-type coatings sales, expressed as a percentage. All values, except percentages, are in millions of dollars.

- 11. In the period 2002-2005, the total U.S. market for exterior water-type architectural paints experienced an increase of 9.36% (i.e., from \$1,297 million to \$1,418 million). As described in Item 5 above, during this time period sales of Supercote<sup>™</sup> experienced a 470% increase.
- 12. I have analyzed the advertising and sales aid costs of Textured Coatings of America, Inc. in the time period 2000 through 2006. This analysis is provided as Exhibit 6. A summary of the analysis of Exhibit 6 is provided below:

Year	General Advertising (\$)	Sales Aids (\$)	Total Advertising and Sales Aids (\$)				
2000	89,296.27	108,736.57	198,032.84				
2001	67,686.03	129,287.75	196,973.78				
2002	62,877.51	128,853.03	191,730.54				
2003	48,495.74	210,365.03	258,860.77				
2004	45,961.36	292,335.93	338,297.29				
2005	31,019.60	158,784.82	189,804.42				
2006	23,735.12	191,944.28	215,679.40				

- 13. In the table above, the term "General Advertising" refers to expenses related to traditional advertising such as publicity firms, ads in various publications, mass mailings, website design, and the like. The term "Sales Aids" refers to expenses related to creating and distributing sales aids to dealers, architects, contractors, and other interested buyers. The term "Total Advertising and Sales Aids" refers to the sum of General Advertising and Sales Aids. Figures for 2006 are annualized.
- 14. Regarding sales aids, Textured Coatings of America, Inc. has created a unique set of sales aids for both the commercial and home improvement divisions. Regarding commercial sales

aids, these include a sophisticated commercial binder containing product information, samples, brochures, and application guides.

- 15. Importantly, the binder described in Item 14 was developed and produced during the period 2003-2004 which is reflected in the increase in sales aid expenses during this period. The only information contained in the binder regarding Supercote IR is a technical data sheet describing the product. No Supercote IR brochures or samples have been included in the binder. Furthermore, as shown in the table above, the cost of developing and producing the commercial sales aid binder was incurred only in 2003-2004. Indeed, sales aids expenses decreased 45.7% in 2005 relative to expenses in 2004 (i.e., \$158,784.82 in 2005 compared with \$210,365.03 in 2004), which decrease is attributable to decreased expense due to the end of development and production of the binder. Furthermore, total advertising and sales aid expenses in 2005 actually decreased relative to 2002 expenses (i.e., \$189,804.42 in 2005 compared with \$191,730.54 in 2002).
- 16. Regarding home improvement sales aids, these include sales kits, pitch books, brochures, and demonstration equipment. None of these home improvement sales aids are produced specifically for Supercote IR customers.
- 17. Regarding Supercote IR marketing, the amount spent on the Supercote IR line of products since its introduction and through the period 2003-2006 is consistent with the advertising and sales aid expenditures on other products of Textured Coatings of America, Inc.
- 18. During 2004-2006, Textured Coatings of America, Inc. instituted a new program for home improvement dealers which gave them an allowance to purchase sales aids based on a percentage of prior year sales. The result of this program was to convert sales aids from a marketing tool into a commodity that dealers could purchase to market their services to homeowners. This shift in emphasis demonstrates that the development of sales aids did not create the Supercote IR market, but is instead a response to increased sales and dealer demand.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements are so made punishable by fine or imprisonment, or both, under Section 101 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

8/22/06 Date

Julie K. Mowery

#### Attachments:

- Exhibit 1: Sales figures, Textured Coatings of America, Inc., 2000-2006.
- Exhibits 2-5: U.S. Census Bureau economic reports "Paints and Allied Products" for 2002-2005, respectively.
- Exhibit 6: Advertising and sales aids expenses, Textured Coatings of America, Inc., 2000-2006.

Exhibit 1: Sales figures, Textured Coatings of America, Inc., 2000-2006.

Textured Coatings of America, Inc Supercote IR vs. Non-IR Sales, Pricing, & Cost Analysis 2000 - 2006 (Annualized)

	2000 Total	2001 Total	2002 Total	2003 Total	2004 Total	2005 Total	2006 Total Annualized
Total Sales:	13,418,683.47	12,752,870.10	11,536,815.50	13,527,712.29	14,629,643.00	15,393,208.58	16,794,975.82
Supercote Sales: Non-IR Supercote Sales	148,939.00	139,933.60	568,421.24	295,686.54			
IR Supercote Sales	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,		1,312,989.50	2,800,427.38	3,240,090.00	4,212,667.60
Total	148,939.00	139,933.60	568,421.24	1,608,676.04	2,800,427.38	3,240,090.00	4,212,667.60
Supercote Sales Growth: (Relative to 2002)				183.01%	392.70%	470.00%	641.30%
Pricing:							
Pricing Supercote Non-IR	18.95	18.95	18.95	18.95 24.95	19.95 29.95	20.95 30.95	22.45 34.95
Pricing Supercote IR				24.95	29.93	30.95	34.53

Exhibits 2-5: U.S. Census Bureau economic reports MA325F(02)-1, MA325F(03)-1, MA325F(04)-1, and MA325F(05)-1, "Paints and Allied Products" for 2002-2005, respectively.

MA325F(02)-1

Current data are released electronically on Internet for all individual surveys as they become available. Use: http://www.census.gov/mcd/. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer."

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2002, total manufacturers' estimated shipments of paint and

allied products amounted to \$17,210.4 million, virtually unchanged from the 2001 shipments of \$17,274.7 million. Shipments of architectural coatings increased 1.2 percent to \$7,123.1 million in 2002, from \$7,038.3 million in 2001. Shipments of OEM coatings amounted to \$5,548.2 million in 2002, virtually unchanged from the 2001 shipments of \$5,566.6. Shipments of special-purpose coatings decreased 1.7 percent to \$3,351.5 million in 2002, from \$3,408.1 million in 2001. Shipments of miscellaneous allied paint products decreased 5.9 percent to \$1,187.6 million in 2002, from \$1,261.7 million in 2001.

For general CIR information, explanation of general terms and historical note, see the appendix.

Current Industrial Reports

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Thanos Theodoropoulos, 301-763-1606.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

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Table 1. Summary of Estimated U.S. Total Quantity and Value of Shipments of Paint and Allied Products: 1997 to 2002 [Quantity in millions of gallons. Value in millions of dollars]

Year	Total				Architectural Product coating Coatings OEM		• • • • • • • • • • • • • • • • • • • •	Special-p coatir	•	Miscellaneous allied paint products		
	Quantity	Value		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2002 2001 2000 1999 1998	1,392.9 1,467.2 1,466.2 1,443.7	17,210.4 17,274.7 17,724.7 17,813.4 17,298.2 16,559.5	r/	718.7 667.0 650.6 660.2 631.6 655.6	7,123.1 7,038.3 6,461.4 6,617.9 6,115.2 6,264.9	412.0 406.5 453.4 439.7 428.3 425.4	5,548.2 5,566.6 6,149.2 6,146.3 6,098.2 5,750.7	183.0 161.2 182.4 174.4 173.3 181.8	3,351.5 3,408.1 3,607.0 3,532.3 3,472.0 2,896.0	149.3 158.2 180.8 191.9 210.5 210.0	1,187.6 1,261.7 1,507.1 1,516.9 1,612.8 1,647.9	

r/Revised by 5 percent or more from previously published data.

Note: Data for 1997 through 2002 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These factors are: 1.002 for "Architectural coatings," .993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous allied paint products." For example: the quantity and value of OEM coatings for 2002 shown in Table 2 amounted to 414,943 and \$5,587,296, respectively. Adjusting these data by the factor of .993 (multiplying 414,943 and 5,587,296 by .993) equals the adjusted and rounded quantity and value of 412.0 and \$5,548.2 shown in Table 1. For 1997, the adjustment factors are: 1.008 for "Architectural coatings," 0.989 for "Product coatings OEM," 1.011 for "Special-purpose coatings," and 1.026 for "Miscellaneous allied paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510, formerly SIC 2851). The adjustment factors (based on the 1997 Census of Manufactures' relationships) bring each product class value up to 100 percent. Quarterly data for 2002 and 2001 reflect the adjusted totals in Table 1 and are shown in Table 3 along with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2002 and 2001 [Quantity in thousand of gallons. Value in thousand of dollars]

		2002					2001			
Product code	Product description	Quantity	Value		Quantity		Value			
325510	Paint and allied products 1/	1,448,755	17,018,272		1,379,399		17,076,636			
3255101	Architectural coatings	717,230 70,967	7,108,866 820,186	r/	665,705 64,418		7,024,254 789,979			
3255101111	Solvent thinned paints and tinting bases, including barn and roof paints	19,874	227,580		18,513		213,751			
3255101115	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels	11,444	155,325	r/	11,847	r/	185,268			
3255101119	Solvent thinned undercoaters and primers	9,184	109,350		8,118	• •	98,981			
3255101121	Solvent thinned clear finishes and sealers	5,701	69,670	r/	5,147	-/	63,066			
					•	17				
3255101125	Solvent thinned stains, including shingle and shake	14,665	176,449	r/	13,020		160,663			
3255101129	Other exterior solvent thinned coatings, including bituminous paints	10,099	81,812		7,773		68,250			
	Exterior water-type	182,423	1,863,503	r/	172,253	r/	1,885,278			
3255101131	Water thinned paints and tinting bases, including barn									
	and roof paints	118,492	1,296,921	r/	115,147		1,369,898			
3255101135	Water thinned exterior-interior deck and floor enamels	4,186	38,948	r/	3,960	r/	38,154			
3255101139	Water thinned undercoaters and primers	13,786	145,495	r/	11,791		133,167			
3255101141	Water thinned stains and sealers	16,773	158,898	r/	15,817	r/	156,180			
3255101145	Other exterior water thinned coatings	29.186	223,241		25,538		187,879			
0000101110	Interior solvent-type	48,947	583,634		43,897		555,978			
3255101211	Flat solvent thinned wall paint and tinting bases, including		98.147	-/	\	-/				
3255101215	mill white paints	6,288		r/	2,927	r/	60,881			
3255101219	thinned paints and enamelsSemigloss, eggshell, satin solvent thinned paints, and	4,164	66,886	r/	3,638	Γ/	55,292			
	tinting bases	9,674	125,579		10,668		151,490			
3255101221	Solvent thinned undercoaters and primers	11,602	118,972		11,168		115,694			
3255101225	Solvent thinned clear finishes and sealers	7,429	91,865		7,510		100,879			
3255101229	Solvent thinned stains	1,892	18,536		1,936		25,503			
	Other interior solvent thinned coatings	7,898	63,649		6.050		46,239			
3255101231		•	-	-/			•			
	Interior water-type	407,104	3,762,439	r/	378,136		3,723,338			
3255101235	Flat water thinned paints and tinting bases	162,810	1,298,859	r/	152,060		1,293,727			
3255101239	Semigloss, eggshell, satin, and other water thinned paints					,				
	and tinting bases	164,419	1,675,411			Γ/	1,715,086			
3255101241	Water thinned undercoaters and primers	43,051	336,487	r/	37,818		317,270			
3255101245	Other interior water thinned coatings, stains, and sealers	36,824	451,682		33,590		397,255			
3255101249	Architectural lacquers	5,808	55,698		5,167		47,718			
3255101YWV	· · · · · · · · · · · · · · · · · · ·	1,981	23,406		1,834		21,963			
3255104	Product finishes for original equipment manufacturers (OEM),									
	excluding marine coatings	414,943	5,587,296		409,326		5,605,798			
3255104111	Automobile, light truck, van, and sport utility vehicle finishes.	47,994	1,069,435		44,434		1,055,137			
3255104121	Automobile parts finishes	5,636	157,997	r/	5,111	r/	148,797			
3255104131	Heavy duty truck, bus, and recreational vehicle finishes	12,481	298,665		12,064		272,620			
3255104141	Other transportation equipment finishes, including aircraft				,-					
000101111	and railroad	11,558	161,933		12,473		182,520			
3255104211	Appliance, heating equipment, and air-conditioner finishes	7,329	86,341		7,963		116,858			
	Wood furniture, cabinet, and fixture finishes	43,725	463,771		42,503		464.626			
3255104215										
3255104219	Wood and composition board flat stock finishes	10,060	104,387		11,287		121,097			
3255104221	Metal building product finishes, including coatings for	05.055	5 4 0 0 0 F		00.001		500 147			
	aluminum extrusions and siding	35,855	543,635		36,831		582,147			
3255104225	Container and closure finishes	43,393	453,281		38,583		438,230			
3255104229	Machinery and equipment finishes, including road building									
	equipment and farm implements	18,865	461,740		19,567		467,836			
3255104231	Nonwood furniture and fixture finishes, including business equipment finishes	38,842	413,894		56,109		479,205			
3255104235	Paper, paper board, film, and foil finishes, excluding pigment									
	binders	14,241	119,927		14,437	Γ/	115,020			
3255104239	Electrical insulating coatings	4,447	32,295		1,898		28,546			
	Powder coatings	77,567	764,855		61,534		721,003			
3255104241	Appliance powder coatings 2/	11,889	165,869		9,509		138,550			
3255104245	Automotive powder coatings 2/	8,903	103,643		8,098		105,419			
3255104249	Architectural powder coatings (such as aluminum						•			
	extrusions) 2/	2.062	19,403		1,671		22,365			
3255104251	Lawn and garden powder coatings 2/	2,434	23,194		1,902		23,993			
	** *		283,636		20,660		288,464			
3255104255	General metal finishing powder coatings 2/	22,203	00,030		20,000		200,404			

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Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2002 and 2001 [Quantity in thousand of gallons. Value in thousand of dollars]

		20	002		2001			
Product code	Product description	Quantity	Value		Quantity		Value	
code		Quantity	Varue		Quantity		value	
3255104259	Thermoset functional powder coatings (for pipe, rebar,							
	electrical insulation, etc.) 2/	(D)	(D)		(D)		(D)	
3255104261	Thermoplastic powder coatings (all) 2/	(D)	(D)		(D)		(D)	
3255104265	Other industrial product finishes	38,485	399,391		39,793		368,162	
3255104YWV	Product finishes for original equipment manufacturers (OEM),							
	excluding marine coatings, n.s.k.	4,465	55,749	r/	4,739		43,994	
3255107	Special-purpose coatings, including all marine coatings	174,114	3,188,857		153,375		3,242,694	
	industrial plants and/or facilities requiring protection against extreme temperatures, fungi, chemicals, fumes, etc.):							
3255107111	Interior	23,370	227.343		14,760		212.382	
3255107111	Exterior	34,207	558,831		28,384		541,574	
3255107121	Traffic marking paints (all types; shelf goods and highway	0.,201	000,000		,		0.10,000	
0200101121	department)	39,397	240,644		37,403		280,453	
3255107131	Automotive, other transportation and machinery refinish	,	,-		•		•	
	paints and enamels, including primers	45,979	1,632,501		42,451		1,671,812	
3255107141	Marine paints, ship and off-shore facilities and shelf goods							
	for both new construction and marine refinish and							
	maintenance, excludes spar varnish	13,565	253,207	r/	12,854		276,873	
3255107151	Marine paints for yacht and pleasure craft, new construction,							
	refinish, and maintenance	(D)	(D)		(D)		(D)	
3255107161	Aerosol-paint concentrates produced for packaging in aerosol	(70)	<b>(D)</b>		(10)		(D)	
	containers	(D)	(D)		(D)		(D)	
3255107YWV	Special-purpose coatings, n.s.k.	4,233	60,869		3,982		58,408	
325510A	Miscellaneous allied paint products	142,468	1,133,253		150,993		1,203,890	
325510A111	Paint and varnish removers	6,433	59,630	r/	7,016		61,549	
325510A121	Thinners for lacquers and other solvent based paint products	31,386	153,264		32,757		166,720	
325510A131	Pigment dispersions	25,151	385,701		24,143		364,958	
325510A141	Other miscellaneous allied paint products, including brush				0			
	cleaners, ink vehicles, putty and glazing compounds, etc	78,512	500,221	r/	85,950	r/	577,259	
325510AYWV	Miscellaneous allied paint products, n.s.k	986	34,437		1,127		33,404	

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind. r/Revised by 5 percent or more from previously published data.

2/Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon). Data collected in pounds amounted to 387,835 thousand pounds in 2002 and 307,670 thousand pounds in 2001.

<sup>1/</sup>Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 1997 Economic Census, Manufacturing sector's final report.

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2002 and 2001 [Quantity in thousands of gallons. Value in thousands of dollars]

#### As revised

Quarter and year	Tot	tal	Archite coati		Product o		Special-լ coati	•
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2002								
Total	1,313,696	16,022,757	718,664	7,123,083	412,038	5,548,184	182,994	3,351,490
Fourth quarter Third quarter Second quarter First quarter	297,509 348,625 366,240 301,322	3,600,709 4,251,368 4,440,745 3,729,935	157,525 189,790 204,075 167,274	1,531,123 1,913,904 2,036,067 1,641,989	103,466 106,667 106,667 95,238	1,362,893 1,419,680 1,448,653 1,316,958	36,518 52,168 55,498 38,810	706,693 917,784 956,025 770,988
2001								
Total	1,234,694	16,012,931	667,036	7,038,303	406,461	5,566,557	161,197	3,408,071
Fourth quarter Third quarter Second quarter First quarter	282,566 320,954 345,755 285,419	3,722,517 4,172,772 4,428,762 3,688,880	154,662 175,752 188,981 147,641	1,663,365 1,868,950 1,988,244 1,517,744	94,593 99,571 108,230 104,067	1,310,024 1,378,972 1,466,992 1,410,569	33,311 45,631 48,544 33,711	749,128 924,850 973,526 760,567
				As pul	blished			
Quarter and year	To	tal	Architectural coatings		Product o	.,	Special-purpose coatings	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
2002							•	
Total	1,247,612	16,360,897	677,667	7,190,977	413,920	5,844,207	156,025	3,325,713
Fourth quarter Third quarter Second quarter First quarter	283,614 330,597 346,906 286,495	3,682,585 4,338,298 4,530,092 3,809,922	148,539 178,963 192,433 157,732	1,545,717 1,932,146 2,055,474 1,657,640	103,939 107,154 107,154 95,673	1,435,610 1,495,427 1,525,946 1,387,224	31,136 44,480 47,319 33,090	701,258 910,725 948,672 765,058
2001								
Total	1,187,214	15,717,539	618,436	6,744,304	407,034	5,560,939	161,744	3,412,296
Fourth quarter Third quarter Second quarter First quarter	271,543 308,445 332,303 274,923	3,652,643 4,094,458 4,345,437 3,625,001	143,393 162,947 175,212 136,884	1,593,884 1,790,881 1,905,193 1,454,346	94,726 99,712 108,382 104,214	1,308,702 1,377,581 1,465,511 1,409,145	33,424 45,786 48,709 33,825	750,057 925,996 974,733 761,510

See note at end of Table 1.

Table 4. Value of Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2002 and 2001 [Value in millions of dollars]

Product code	Product description	Manu- facturers' shipments	Exports of domestic merchan- dise 1/	Percent exports to manufac- turers' shipments	Imports for consump- tion 2/3/	Apparent consumption 4/
3255101100,	Paint, varnish, and lacquer 2002 2001	16,022.8	1,082.3	6.8	416.2	15,356.7
4100, 7100		16,013.0	1,042.9	6.5	438.4	15,408.5
325510A111,	Paint and varnish removers, including thinners	223.1	70.0	31.4	19.4	172.5
A121		239.2	61.2	25.6	17.2	195.2
325510A141	Other miscellaneous allied paint products	524.2 605.0	134.6 154.7	25.7 25.6	67.7 85.6	457.3 535.9

<sup>1/</sup>Source: Census Bureau report EM 545, U. S. Exports.

<sup>2/</sup>Source: Census Bureau report IM 145, U. S. Imports for Consumption.

<sup>3/</sup>Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

<sup>4/</sup>Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2002

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000
325510A111. A121	Paint and varnish removers, including thinners	3814.00.0000	3814.00.1000 3814.00.2000 3814.00.5010 3814.00.5090
325510A141	Other miscellaneous allied paint products	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090

1/Source: 2002 edition, Harmonized System-Based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2002).

## Appendix.

# General CIR Survey Information, Explanation of General Terms and Historical Note

#### **GENERAL**

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

# NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

#### **FUNDING**

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

#### **RELIABILITY OF DATA**

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

#### **DATA REVISIONS**

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5percent from previously published data are indicated by footnotes.

#### **DISCLOSURE**

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

#### **EXPLANATION OF GENERAL TERMS**

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

**Consumption.** Materials used in producing or processing a product or otherwise removing the product from the inventory.

**Exports.** Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

**Interplant transfers.** Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery In place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

**Net receipts.** Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

**Production.** The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

**Quantitles produced and consumed.** Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

**Unfilled orders (backlog).** Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

#### HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

MA325F(03)-1

Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: http://www.census.gov/mcd/. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the menu to view the PDF file or to download the worksheet file (WK format) to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2003, total manufacturers' estimated shipments of paint and

allied products amounted to \$18,080.7 million, an increase of 3.5 percent from the 2002 shipments of \$17,465.8 million. Shipments of architectural coatings increased 6.5 percent to \$8,104.5 million in 2003, from \$7,610.1 million in 2002. Shipments of OEM coatings amounted to \$5,561.5 million in 2003, virtually unchanged from the 2002 shipments' total of \$5,556.2 million. Shipments of special-purpose coatings increased 3.6 percent to \$3,267.9 million in 2003, from \$3,153.9 million in 2002. Shipments of miscellaneous allied paint products amounted to \$1,146.8 million in 2003, virtually unchanged from \$1,145.6 million in 2002.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division (MCD), Washington, DC 20233-6900, or call Betty Sutter, 301-763-5164.

For mail or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or call 301-763-4673.

## USCENSUSBUREAU

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Table 1. Summary of Estimated United States Total Quantity and Value of Shipments of Paint and Allied Products: 1998 to 2003 [Quantity in millions of gallons. Value in millions of dollars]

Varr	Total		Architectural coatings		Product coatings OEM			Special- coa	ourpose ings	Miscellaneous allied paint products		
Year	Quantity	Value	Quantity		Value	Quantity	Value		Quantity	Value	Quantity	Value
2003 2002 2001 2000 1999	1,461.4 1,434.0 1,392.9 1,467.2 1,466.2 1,443.7	18,080.7 17,465.8 17,274.7 17,724.7 17,813.4 17,298.2	772.8 709.8 667.0 650.6 660.2 631.6	r/	8,104.5 7,610.1 7,038.3 6,461.4 6,617.9 6,115.2	400.3 408.7 406.5 453.4 439.7 428.3	5,561.5 5,556.2 5,566.6 6,149.2 6,146.3 6,098.2	r/	143.4 172.2 r/ 161.2 182.4 174.4 173.3	3,267.9 3,153.9 3,408.1 3,607.0 3,532.3 3,472.0	144.8 143.2 158.2 180.8 191.9 210.5	1,146.8 1,145.6 1,261.7 1,507.1 1,516.9 1,612.8

r/Revised by 5 percent or more from previously published data.

Note: Data for 1998 through 2003 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing the product class totals shown in Table 2 by adjustment factors. For 2003 and 2002, these factors are: 0.984 for "Architectural coatings," 1.007 for "Product coatings OEM," 1.001 for "Special-purpose coatings," and 1.024 for "Miscellaneous paint products." For example, the quantity and value of OEM coatings for 2002 shown in Table 2 amounted to 405,858 and \$5,517,601, respectively. Adjusting these data by the factor of 1.007 (multiplying 405,858 and 5,517,601 by 1.007) equals the adjusted and rounded quantity and value of 408.7 and \$5,556.2 shown in Table 1. For 1998 to 2001, the adjustment factors are: 1.002 for "Architectural coatings," 0.993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510 formerly SIC 2851). The adjustment factors (based on the 2002 Economic Census, Manufactures Sector's relationships) bring each product class value up to 100 percent. Quarterly data for 2003 and 2002 reflect the adjusted totals in Table 1 and are shown in Table 3 along with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2003 and 2002 [Quantity in thousand of gallons. Value in thousand of dollars]

			2003		2002			
Product code	Product description	Quantity	Value		Quantity		Value	
325510	Paint and allied products 1/	1,467,471	18,142,579		1,438,999		17,519,838	
3255101	Architectural coatings Exterior solvent-type	785,371 75,090	8,236,276 894,842		721,341 69,989	r/	7,733,817 823,812	
3255101111	Solvent thinned paints and tinting bases, including barn and roof paints	19,851	215,327		19,598		224,521	
3255101115	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels	16,168	242,058		11,039		151,149	
325510111'	Solvent thinned undercoaters and primers	8,605	101,438		9,153		110,887	
3255101121	Solvent thinned clear finishes and sealers	5,605	71,301		5,688	r/	73,546	
3255101125	Solvent thinned stains, including shingle and shake	15,209	187,238		14,670	•,	185,069	
	Other exterior solvent thinned coatings, including	13,203	107,230		14,070		103,003	
3255101129		0.650	77 400		0.041		70 640	
	bituminous paints	9,652	77,480		9,841	/	78,640	
	Exterior water-type	191,283	2,090,506		182,043	Γ/	2,030,879	
3255101131	Water thinned paints and tinting bases, including barn						1	
	and roof paints	112,021	1,295,764		118,379	r/	1,386,192	
3255101135	Water thinned exterior-interior deck and floor enamels	3,709	37,968		4,152		38,227	
3255101139	Water thinned undercoaters and primers	24,881	266,758		13,747	r/	158,942	
3255101141	Water thinned stains and sealers	21,923	255,148		16,877	r/	209,683	
3255101145	Other exterior water thinned coatings	28,749	234,868		28,888	r/	237,835	
5255101110	Interior solvent-type	58,944	649,369		48,987	-,	579,272	
3255101211	Flat solvent thinned wall paint and tinting bases, including mill white paints	2,617	63,703		6,287		98,103	
3255101215	Gloss and quick drying enamels and other gloss solvent thinned paints and enamels	3,340	46,077	r/	3,933	r/	61,018	
3255101219	Semigloss, eggshell, satin solvent thinned paints, and tinting bases	11,367	152,168	-,	9,646	-,	124,793	
3255101221	Solvent thinned undercoaters and primers	24,866	218,575		11,589		119,259	
	Solvent thinned clear finishes and sealers		218,373 (D)		11,369 (D)	-/	97,342	
3255101225		(D)				1/	•	
3255101229	Solvent thinned stains	1,827	19,017		1,915	- /	18,836	
3255101231	Other interior solvent thinned coatings	(D)	(D)		(D)	٠.	59,921	
	Interior water-type	451,325	4,511,511			r/	4,220,842	
3255101235 3255101239	Flat water thinned paints and tinting bases Semigloss, eggshell, satin, and other water thinned paints	181,385	1,498,850		162,287		1,386,179	
	and tinting bases	190,534	2,201,629		168,600		1,998,600	
3255101241	Water thinned undercoaters and primers	42,174	344,888		44,697	r/	383,472	
3255101245	Other interior water thinned coatings, stains, and sealers	37,232	466,144		36,946		452,591	
3255101249	Architectural lacquers	6,360	62,491		5,802		55,606	
3255101YWV	Architectural coatings, n.s.k.	2,369	27,557		1,990		23,406	
3255104	Product finishes for original equipment manufacturers (OEM),	207 527	E E22 021		405.050		E E 17 601	
2255104111	excluding marine coatings	397,537	5,522,821		405,858		5,517,601	
3255104111	Automobile, light truck, van, and sport utility vehicle finishes	45,584	978,019		47,899		1,068,361	
3255104121	Automobile parts finishes	4,912	149,202		5,568		156,014	
3255104131 3255104141	Heavy duty truck, bus, and recreational vehicle finishes Other transportation equipment finishes, including aircraft	12,055	290,228	,	12,155	,	295,420	
	and railroad	8,962	126,443	Γ/	7,807	Γ/	112,773	
3255104211	Appliance, heating equipment, and air-conditioner finishes	7,979	87,167		7,333		86,397	
3255104215	Wood furniture, cabinet, and fixture finishes	43,551	467,673		43,155		460,325	
3255104219	Wood and composition board flat stock finishes	9,931	116,123		10,025		103,713	
3255104221	Metal building product finishes, including coatings for							
	aluminum extrusions and siding	35,968	548,307		35,720		541,547	
3255104225	Container and closure finishes	35,332	442,459		43,335		452,817	
3255104229	Machinery and equipment finishes, including road building							
	equipment and farm implements	18,554	507,531		18,720		458,432	
3255104231	Nonwood furniture and fixture finishes, including business							
	equipment finishes	43,046	413,204		38,576		410,588	
3255104235	Paper, paper board, film, and foil finishes, excluding pigment							
	binders	14,570	126,555		14,237		119,883	
3255104239	Electrical insulating coatings	4,007	25,689		4,422		31,905	
	Powder coatings	72,110	799,572		74,076		764,618	
3255104241	Appliance powder coatings 2/	10,837	182,976		11,889		165,869	
3255104245	Automotive powder coatings 2/	9,128	108,519		8,545		103,690	
3255104249	Architectural powder coatings (such as aluminum				-,		,	
3233101233	extrusions) 2/	1,428	20,179		2,060		19,403	
3255104251	Lawn and garden powder coatings 2/	1,544	28,623	r/	1,944		23,194	
3255104255	General metal finishing powder coatings 2/	19,418	307,534		19,562		283,352	
2202101233	Control of the contro	,	20.,551	-,	30,300		,	

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Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2003 and 2002 [Quantity in thousand of gallons. Value in thousand of dollars]

Dun duna	Product description	2	003	2002			
Product code	riodact description	Quantity	Value	Quantity	,	Value	
3255104259	Thermoset functional powder coatings (for pipe, rebar, electrical insulation, etc.) 2/	(D)	(D)	(D		(D)	
3255104261 3255104265	Thermoplastic powder coatings (all) 2/Other industrial product finishes	(D) 37,939	(D) 410,816	D) 38,366		(D) 399,066	
3255104YWV	Product finishes for original equipment manufacturers (OEM), excluding marine coatings, n.s.k.	3,037	33,833	4,464	:	55,742	
3255107	Special-purpose coatings, including all marine coatings	143,278	3,264,671	172,046	;	3,150,757	
3255107111	Interior	14,103	212,479	23,963		235,407	
3255107115	Exterior	28,092	574,359	33,758	;	554,695	
3255107121	Traffic marking paints (all types; shelf goods and highway						
3255107131	department)	29,364	218,619	40,003	;	242,950	
5255101151	paints and enamels, including primers	49,525	1,867,618	45.838		1,631,523	
3255107141	Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinish and		2,221,223				
	maintenance, excludes spar varnish	11,541	242,232	13,470	)	251,267	
3255107151	Marine paints for yacht and pleasure craft, new construction, refinish, and maintenance	91	2,213	(D	`	(D)	
3255107161	Aerosol-paint concentrates produced for packaging in aerosol	<b>J.</b>	2,213	()	,	(5)	
3233107101	containers	9.742	134.367	(D	)	(D)	
3255107YWV	Special-purpose coatings, n.s.k.	820	12,784	•		52,494	
325510B	Miscellaneous allied paint products	141,285	1,118,811	139,754		1,117,663	
325510B111	Paint and varnish removers	5,075	53,956	6,138		59,508	
325510B121	Thinners for lacquers and other solvent based paint products	27,112	145,927	30,911		152,180	
325510B131	Pigment dispersions	28,569	392,679	25,211		386,519	
325510B141	Other miscellaneous allied paint products, including brush						
	cleaners, ink vehicles, putty and glazing compounds, etc	78,508	474,064	76,806		487,597	
325510BYWV	Miscellaneous allied paint products, n.s.k	2,021	52,185	r/ 688	r/	31,859	

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind. r/Revised by 5 percent or more from previously published data.

enamels, and allied products, based on relationships observed in the 1997 Economic Census, Manufacturing sector's final report.

2/Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon).

Data collected in pounds amounted to 360,550 thousand pounds in 2003 and 370,380 thousand pounds in 2002.

<sup>1/</sup>Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 1997 Economic Census. Manufacturing sector's final report.

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2003 and 2002 [Quantity in thousands of gallons. Value in thousands of dollars]

#### As revised

Quarter and year	Total			tectural tings		t coatings EM	Special-purpose coatings		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2003									
Total	1,316,546	16,933,912	772,805	8,104,495	400,319	5,561,481	143,422	3,267,936	
Fourth quarter Third quarter Second quarter First quarter	289,055 343,702 367,101 316,688	3,905,827 4,374,730 4,671,816 3,981,539	171,368 208,985 213,250 179,202	1,998,017 2,171,757 2,193,694 1,741,027	88,859 93,535 110,041 107,884	1,219,657 1,297,508 1,544,653 1,499,663	28,828 41,182 43,810 29,602	688,153 905,465 933,469 740,849	
2002									
Total	1,290,719	16,320,206	709,800	7,610,075	408,700	5,556,223	172,219	3,153,908	
Fourth quarter Third quarter Second quarter First quarter	292,578 342,348 359,591 296,202	3,665,702 4,330,168 4,525,685 3,798,651	155,582 187,449 201,558 165,211	1,635,803 2,044,754 2,175,269 1,754,249	102,628 105,803 105,803 94,466	1,364,868 1,421,737 1,450,752 1,318,866	34,368 49,096 52,230 36,525	665,031 863,677 899,664 725,536	
				As pub	lished				
Quarter and year	Т	otal		tectural tings	Product coatings OEM		Special-purpose coatings		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2003									
Total	1,338,544	16,124,718	781,224	7,626,310	383,926	5,256,443	173,394	3,241,965	
Fourth quarter Third quarter Second quarter First quarter	293,307 350,755 374,074 320,408	3,715,574 4,168,229 4,450,243 3,790,672	173,235 211,262 215,573 181,154	1,880,129 2,043,618 2,064,261 1,638,302	85,220 89,705 105,535 103,466	1,152,761 1,226,342 1,459,931 1,417,409	34,852 49,788 52,966 35,788	682,684 898,269 926,051 734,961	
2002									
Total	1,313,696	16,022,757	718,664	7,123,083	412,038	5,548,184	182,994	3,351,490	
Fourth quarter Third quarter Second quarter First quarter	297,509 348,625 366,240 301,322	3,600,709 4,251,368 4,440,745 3,729,935	157,525 189,790 204,075 167,274	1,531,123 1,913,904 2,036,067 1,641,989	103,466 106,667 106,667 95,238	1,362,893 1,419,680 1,448,653 1,316,958	36,518 52,168 55,498 38,810	706,693 917,784 956,025 770,988	

See note at end of Table 1.

Table 4. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2003 and 2002 [Quantity in millions of gallons. Value in millions of dollars]

Product code	Product description	Manufacturers' shipments		Exports of domestic merchandise 1/		Percent exports to manufacturers' shipments		Imports for consumption 2/		Apparent consumption 4/	
Code		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value 3/	Quantity	Value
3255101100, 4100, 7100	Paint, varnish, and lacquer20032002		16,933.9 16,320.2	(NA) (NA)	1,165.6 1,082.3	(NA) (NA)	6.9 6.6	(NA) (NA)	466.4 416.2	(NA) (NA)	16,234.7 15,654.1
325510B111, B121	Paint and varnish removers including thinners		199.9 211.7	(NA) (NA)	70.6 70.0	(NA) (NA)	35.3 33.1	(NA) (NA)	19.0 19.4	(NA) (NA)	148.3 161.1
325510B141	Other miscellaneous allied paint products		474.1 487.6	(NA) (NA)	131.8 134.6	(NA) (NA)	27.8 27.6	(NA) (NA)	65.3 67.7	(NA) (NA)	407.6 420.7

#### NA Not available.

<sup>1/</sup>Source: Census Bureau report EM 545, U. S. Exports.
2/Source: Census Bureau report IM 145, U. S. Imports for Consumption.
3/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.
4/Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2003

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000
325510B111. B121	Paint and varnish removers, including thinners	3814.00.0000	3814.00.1000 3814.00.2000 3814.00.5010 3814.00.5090
325510B141	Other miscellaneous allied paint products	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090

1/Source: 2003 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2003).

# Appendix.

# General CIR Survey Information, Explanation of General Terms and Historical Note

#### **GENERAL**

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

# NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

#### **FUNDING**

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

#### **RELIABILITY OF DATA**

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

#### **DATA REVISIONS**

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

#### **DISCLOSURE**

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

#### **EXPLANATION OF GENERAL TERMS**

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

**Consumption.** Materials used in producing or processing a product or otherwise removing the product from the inventory.

**Exports.** Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

**Interplant transfers.** Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

**Inventories.** The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

**Net receipts.** Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

**Production.** The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

**Quantities produced and consumed.** Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

**Unfilled orders (backlog).** Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

#### HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

MA325F(04)-1

Current Industrial Reports

Current data are released electronically on internet for all individual surveys as they become available. Use: http://www.census.gov/med/.
Individual reports can be accessed by choosing "Current industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the mean to view the PDF file or to download the worksheet file (XLS format to your personal computer.

These data are also available on Internet through the U.S. Department of Commerce and STAT-USA by subscription. The Internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may call 202-482-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2004, total manufacturers' estimated shipments of paint and allied products amounted to \$19,456.9 million, an increase of 7.5 percent from the 2003 shipments of \$18,092.0 million. Shipments of architectural coatings increased 7.3 percent to \$8,627.3 million in 2004, from \$3,005.2 million in 2008. Shipments of OEM coatings amounted to \$5,937.2 million in 2004, an increase of 7.1 percent, from the 2003 shipments' total of \$5,541.4 million. Shipments of special-purpose coatings increased 9.5 percent to \$3,633.9 million in 2004, from \$3,369.0 million in 2003. Shipments of miscellaneous allied paint products amounted to \$1,202.9 million in 2004, an increase of 2.3 percent, from \$1,175.3 million in 2003.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primary Goods Industries Branch, Manufacturing and Construction Division, (MCD), Washington, DC 20233-6000 or call Butty Sutter, 201-763-5164.
For mall or fax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6000, or

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Table 1. Summary of Estimated United States Total Quantity and Value of Shipments of Paint and Allied Products: 1999 to 2004 [Quantity in millions of gallons. Value in millions of dollars]

Voor	Total		Architectural coatings		Product coatings OEM		Special-r coati	•	Miscellaneous allied paint products	
Year	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	. Value	Quantity	Value
2004	1,564.3 1,473.5 1,433.9 1,392.9 1,467.2 1,466.2	19,456.9 18,092.0 17,465.8 17,274.7 17,724.7 17,813.4	809.0 762.0 709.8 667.0 650.6 660.2	8,627.8 8,006.2 7,610.1 7,038.3 6,461.4 6,617.9	427.8 398.5 408.7 406.5 453.4 439.7	5,937.2 5,541.4 5,556.2 5,566.6 6,149.2 6,146.3	173.3 r/ 165.1 172.2 161.2 182.4 174.4	3,688.9 3,369.0 3,153.9 3,408.1 3,607.0 3,532.3	154.2 148.0 143.2 158.2 180.8 191.9	1,202.9 1,175.3 1,145.6 1,261.7 1,507.1 1,516.9

r/Revised by 5 percent or more from previously published data.

Note: Data for 1999 through 2004 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing the product class totals shown in Table 2 by adjustment factors. For 2002 through 2004 these factors are: 0.984 for "Architectural coatings," 1.007 for "Product coatings OEM," 1.001 for "Special-purpose coatings," and 1.024 for "Miscellaneous allied paint products." For example, the quantity and value of OEM coatings for 2003 shown in Table 2 amounted to 395,688 and \$5,502,922 respectively. Adjusting these data by the factor of 1.007 (multiplying 395,688 and 5,502,922 by 1.007) equals the adjusted and rounded quantity and value of 398.5 and \$5,541.4 shown in Table 1. For 1999 to 2001, the adjustment factors are: 1.002 for "Architectural coatings," 0.993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous allied paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510 formerly SIC 2851). The adjustment factors (based on the 2002 Economic Census, Manufacturing Sector's relationships) bring each product class value up to 100 percent. Quarterly data for 2004 and 2003 reflect the adjusted totals in Table 1 and are shown in Table 3 along with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2004 and 2003 [Quantity in thousand of gallons. Value in thousand of dollars]

		2004		;	2003
Product code	Product description	Quantity	Value	Quantity	Value
325510	Paint and allied products 1/	1,570,689	19,524,029	1,479,504	18,152,769
3255101	Architectural coatings	822,186 81,554	8,768,106 965,299	774,364 74,979	8,136,396 892,875
3255101111	Solvent thinned paints and tinting bases, including barn and roof paints	22,359	242,002	19,867	215,109
3255101115	Solvent thinned enamels and tinting bases, including exterior-interior floor enamels	16,774	248,554	16,186	241,535
3255101119	Solvent thinned undercoaters and primers	10,331	117,248	8,528	100,539
3255101121	Solvent thinned clear finishes and sealers	5,894	76,248	5,590	71,125
3255101125	Solvent thinned stains, including shingle and shake	15,992	199,979	15,134	187,009
3255101129	Other exterior solvent thinned coatings, including				
	bituminous paints	10,204	81,268	9,674	77,558
	Exterior water-type	202,668	2,248,599	186,403	2,037,304
3255101131	Water thinned paints and tinting bases, including barn				
	and roof paints	121,800	1,414,222	107,434	1,245,124
3255101135	Water thinned exterior-interior deck and floor enamels	3,741	39,236	3,616	37,235
3255101139	Water thinned undercoaters and primers	27,720	294,460	24,749	265,081
3255101141	Water thinned stains and sealers	22,337	266,971	21,961	255,813
3255101145	Other exterior water thinned coatings	27,070	233,710	28,643	234,051
•	Interior solvent-type	65,778	747,328	60,369	660,705
3255101211	Flat solvent thinned wall paint and tinting bases, including mill white paints	2,848	71,775	r/ 2,423	61,974
3255101215	Gloss and quick drying enamels and other gloss solvent thinned paints and enamels	3,312	47,245	3,333	46,443
3255101219	Semigloss, eggshell, satin solvent thinned paints, and tinting bases	13,874	181,452	11,403	153,248
3255101221	Solvent thinned undercoaters and primers	27,746	263,136	r/ 26,314	229,490
3255101225	Solvent thinned clear finishes and sealers	(D)	(D)	(D)	(D)
3255101229	Solvent thinned stains	1,820	19,131	1,839	19,026
3255101231	Other interior solvent thinned coatings	(D)	(D)	(D)	(D)
	Interior water-type	463,459	4,715,546	443,884	4,455,464
3255101235	Flat water thinned paints and tinting bases	181,230	1,550,792	177,437	1,471,464
3255101239	Semigloss, eggshell, satin, and other water thinned paints				
	and tinting bases	197,333	2,270,731	188,003	2,178,169
3255101241	Water thinned undercoaters and primers	46,008	387,705	40,912	334,883
3255101245	Other interior water thinned coatings, stains, and sealers	38,888	506,318	37,532	470,948
3255101249	Architectural lacquers	6,286	63,012	6,360	62,491
3255101YWV	Architectural coatings, n.s.k.	2,441	28,322	2,369	27,557
3255104	Product finishes for original equipment manufacturers (OEM),				
3-00-00	excluding marine coatings	424,812	5,895,952	395,688	5,502,922
3255104111	Automobile, light truck, van, and sport utility vehicle finishes	49,789	987,604	45,625	978,714
3255104121	Automobile parts finishes	4,953	148,451	4,855	148,952
3255104131	Heavy duty truck, bus, and recreational vehicle finishes	15,652	375,266	12,055	290,232
3255104141	Other transportation equipment finishes, including aircraft				
	and railroad	8,676	130,839	8,995	126,938
3255104211	Appliance, heating equipment, and air-conditioner finishes	8,881	95,158	7,995	87,472
3255104215	Wood furniture, cabinet, and fixture finishes	44,649	507,612	42,468	461,370
3255104219	Wood and composition board flat stock finishes	11,830	124,369	9,932	116,141
3255104221	Metal building product finishes, including coatings for				
	aluminum extrusions and siding	38,575	689,254	35,909	547,649
3255104225	Container and closure finishes	38,643	416,571	34,195	442,759
3255104229	Machinery and equipment finishes, including road building				
	equipment and farm implements	22,611	533,037	18,217	507,956
3255104231	Nonwood furniture and fixture finishes, including business				
	equipment finishes	44,261	463,767	41,859	402,160
3255104235	Paper, paper board, film, and foil finishes, excluding pigment				
	binders	15,995	130,806	14,007	124,203
3255104239	Electrical insulating coatings	920	16,295	4,015	25,840
	Powder coatings	73,946	829,176	72,404	798,264
3255104241	Appliance powder coatings 2/	9,763	173,818	10,837	182,976
3255104245	Automotive powder coatings 2/	5,714	97,479	9,024	106,886
3255104249	Architectural powder coatings (such as aluminum				
	extrusions) 2/	1,808	20,053	r/ 1,827	20,684
3255104251	Lawn and garden powder coatings 2/	1,799	33,129	1,544	28,624
3255104255	General metal finishing powder coatings 2/	21,491	349,893	19,417	307,334
3255104259	Thermoset functional powder coatings (for pipe, rebar,				
	electrical insulation, etc.) 2/	(D)	(D)	(D)	(D)

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2004 and 2003 [Quantity in thousand of gallons. Value in thousand of dollars]

Product	Product description	200	4	2003			
code		Quantity	Value ·	Quant	ty	Value	
3255104261 3255104265 3255104YWV	Thermoplastic powder coatings (all) 2/	(D) 40,318	(D) 415,354	38,1	D) 1 <i>7</i>	(D) 410,439	
	excluding marine coatings, n.s.k.	3,109	32,393	3,0	37	33,833	
3255107	Special-purpose coatings, including all marine coatings	173,087	3,685,255	r/ 164,9	<b>;</b> 0	3,365,680	
3255107111	Interior	22,492	271,264	r/ 24,5	10 r/	258,786	
3255107115	Exterior	35,167	640,447	r/ 34,9	9	596,030	
3255107121	Traffic marking paints (all types; shelf goods and highway						
3255107131	department)	35,907	245,730	r/ 32,2	.7	226,367	
3255107141	paints and enamels, including primers	54,473	2,114,375	50,7	i3	1,880,518	
3255107151	maintenance, excludes spar varnish	12,342	246,723	11,5	7	242,582	
	refinish, and maintenance	100	2,238		91	2,214	
3255107161	Aerosol-paint concentrates produced for packaging in aerosol	700	144 250	0.0		122 521	
	containers	11,728	144,250	9,6	-	133,521	
3255107YWV	Special-purpose coatings, n.s.k.	878	20,228	r/ 1,1	35 r/	25,662	
325510B	Miscellaneous allied paint products	150,604	1,174,716	144,5	:2	1,147,771	
325510B111	Paint and varnish removers	5,329	58,193	5.0		53,756	
325510B121	Thinners for lacquers and other solvent based paint products	32,586	170,739	26.9		144,942	
325510B131	Pigment dispersions	31,748	464,943		35 r/		
325510B141	Other miscellaneous allied paint products, including brush	•			-,	,	
	cleaners, ink vehicles, putty and glazing compounds, etc	80,521	456,833	81,9	′0	484,674	
325510BYWV	Miscellaneous allied paint products, n.s.k.	420	24,008	r/ 3	71 r/	24,710	

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind. r/ Revised by 5 percent or more from previously published data.

<sup>1/</sup>Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 2002 Economic Census, Manufacturing sector's final report.

2/Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon).

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2004 and 2003 [Quantity in thousands of gallons. Value in thousands of dollars]

## As revised

Quarter and year	Total			tectural tings		t coatings EM	Special-purpose coatings				
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value			
2004											
Total	1,410,076	18,253,979	809,031	8,627,816	427,785	5,937,223	173,260	3,688,940			
Fourth quarter Third quarter Second quarter First quarter	315,102 373,757 389,747 331,470	4,104,679 4,843,184 5,000,062 4,306,054	179,157 218,483 225,241 186,150	1,930,426 2,354,178 2,377,958 1,965,254	100,698 108,278 110,488 108,321	1,413,043 1,487,414 1,533,417 1,503,349	35,247 46,996 54,018 36,999	761,210 1,001,592 1,088,687 837,451			
2003											
Total	1,325,526	16,916,701	761,975	8,006,214	398,457	5,541,442	165,094	3,369,045			
Fourth quarter Third quarter Second quarter First quarter	285,746 348,247 371,940 319,593	3,680,762 4,449,169 4,746,747 4,040,023	164,116 207,742 211,981 178,136	1,756,056 2,222,856 2,245,310 1,781,992	88,446 93,100 109,529 107,382	1,215,262 1,292,833 1,539,087 1,494,260	33,184 47,405 50,430 34,075	709,444 933,480 962,350 763,771			
	As published										
Quarter and year	Т	otal	Architectural coatings		Product coatings OEM		Special-purpose coatings				
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value			
2004											
Total	1,323,620	17,029,652	817,450	8,662,481	368,471	5,154,007	137,699	3,213,164			
Fourth quarter Third quarter Second quarter First quarter	295,770 351,372 365,684 310,794	3,827,856 4,527,250 4,666,921 4,007,625	181,021 220,757 227,585 188,087	1,938,182 2,363,637 2,387,512 1,973,150	86,736 93,265 95,168 93,302	1,226,640 1,291,200 1,331,134 1,305,033	28,013 37,350 42,931 29,405	663,034 872,413 948,275 729,442			
2003											
Total	1,316,547	16,933,913	772,806	8,104,496	400,319	5,561,481	143,422	3,267,936			
Fourth quarter Third quarter Second quarter First quarter	284,136 345,412 368,845 318,154	3,685,423 4,453,116 4,750,995 4,044,379	166,449 210,695 214,994 180,668	1,777,613 2,250,143 2,272,873 1,803,867	88,859 93,535 110,041 107,884	1,219,657 1,297,508 1,544,653 1,499,663	28,828 41,182 43,810 29,602	688,153 905,465 933,469 740,849			

See note at end of Table 1.

Table 4. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2004 and 2003 [Quantity in millions of gallons. Value in millions of dollars]

Product code	Product description	Manufacturers' E shipments		Exports of domestic merchandise 1/		Percent exports to manufacturers' shipments		Imports for consumption 2/		Apparent consumption 4/	
code		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value 3/	Quantity	Value
3255101100, 4100, 7100	Paint, varnish, and lacquer 2004 2003	1,410.1 1,325.5	18,254.0 16,916.7	(NA) (NA)	1,209.1 1,165.6	(NA) (NA)	6.6 6.9	(NA) (NA)	499.0 466.4	(NA) (NA)	17,543.9 16,217.5
325510B111, B121	Paint and varnish removers , including thinners2004	37.9 32.0	228.9 198.7	(NA) (NA)	77.3 70.6	(NA) (NA)	33.8 35.5	(NA) (NA)	20.1 19.0	(NA) (NA)	171.7 147.1
325510B141	Other miscellaneous allied paint products2004	80.5 82.0	456.8 484.7	(NA) (NA)	154.4 131.8	(NA) (NA)	33.8 27.2	(NA) (NA)	80.3 65.3	(NA) (NA)	382.7 418.2

NA Not available.

<sup>1/</sup>Source: Census Bureau report EM 545, U. S. Exports.

<sup>2/</sup>Source: Census Bureau report IM 145, U. S. Imports for Consumption.

3/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

4/Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2004

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000
325510B111, B121	Paint and varnish removers, including thinners	3814.00.0000	3814.00.1000 3814.00.2000 3814.00.5010 3814.00.5090
325510B141	Other miscellaneous allied paint products	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090

1/Source: 2004 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2004).

### Appendix. General CIR Survey Information, Explanation of General Terms and Historical Note

### **GENERAL**

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

## NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

### **FUNDING**

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

### **RELIABILITY OF DATA**

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

### **DATA REVISIONS**

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5percent from previously published data are indicated by footnotes.

### **DISCLOSURE**

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

### **EXPLANATION OF GENERAL TERMS**

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

**Consumption.** Materials used in producing or processing a product or otherwise removing the product from the inventory.

**Exports.** Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

**Interplant transfers.** Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

**Inventories.** The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

**Net receipts.** Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

**Production.** The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

**Unfilled orders (backlog).** Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

### HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

MA325F(05)-1

Current Industrial Reports

Current data are released electronically on Internet for all individual surveys as they become available. Use: http://www.census.gov/mcd/. Individual reports can be accessed by choosing "Current Industrial Reports (CIR)," clicking on "CIRs by Subsector;" then choose the survey of interest. Follow the mean to view the PDF file or to download the worksheet file (XLS format) to your personal computer.

These data are also available on internet dirough the U.S. Department of Commerce and STAT-USA by subscription. The internet address is: www.stat-usa.gov/. Follow the prompts to register. Also, you may cell 202-422-1986 or 1-800-STAT-USA, for further information.

SUMMARY OF FINDINGS. In 2005, total manufacturers' estimated shipments of paint and allied products amounted to \$19,363.1 million, an increase of 3.3 percent from the 2004 shipments of \$19,233.2 million. Shipments of architectural coatings increased 3.4 percent to \$8,916.0 million in 2005, from \$3,623.3 million in 2004. Shipments of OEM coatings amounted to \$5,936.3 million in 2005, an increase of 2.0 percent, from the 2004 shipments' total of \$5,837.3 million. Shipments of special-purpose coatings increased 3.1 percent to \$3,635.4 million in 2005, from \$3,525.8 million in 2004. Shipments of miscrease of \$1,330.4 million in 2005, an increase of 9.3 percent, from the \$1,216.7 million in 2004.

For general CIR information, explanation of general terms and historical note, see the appendix.

Address inquiries concerning these data to Primery Goods Industries Branch, Manufacturing and Construction Division, (MCD), Washington, DC 20233-6900 or call Berty Suiter, 201-763-5164. For mail or lax copies of this publication, please contact the Information Services Center, MCD, Washington, DC 20233-6900, or

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Table 1. Summary of Estimated United States Total Quantity and Value of Shipments of Paint and Allied Products: 2000-2005 [Quantity in millions of gallons. Value in millions of dollars]

Year	То	tal	Archite coati				Product coatings S OEM		Special-purpose coatings			Miscellaneo paint pro	
	Quantity	Value	Quantity	Value		Quantity	Value		Quantity	Value		Quantity	Value
2005	1,534.3 1,473.5 1,433.9 1,392.9	19,233.2 18,092.0 17,465.8 17,274.7		8,623.3 8,006.2 7,610.1 7,038.3	r/	404.2 398.5 408.7 406.5	5,986.3 5,867.3 5,541.4 5,556.2 5,566.6 6,149.2	г/	154.5 165.1 172.2 161.2	3,635.4 3,525.8 3,369.0 3,153.9 3,408.1 3,607.0	r/	178.0 171.9 148.0 143.2 158.2 180.8	1,330.4 1,216.7 1,175.3 1,145.6 1,261.7 1,507.1

r/Revised by 5 percent or more from previously published data.

Note: Data for 2000 through 2005 are estimates of the total U.S. value of shipments of paint, varnish, and lacquer. These estimates were developed by increasing the product class totals shown in Table 2 by adjustment factors. For 2002 through 2005 these factors are: 0.984 for "Architectural coatings," 1.007 for "Product coatings OEM," 1.001 for "Special-purpose coatings," and 1.024 for "Miscellaneous allied paint products." For example, the quantity and value of OEM coatings for 2004 shown in Table 2 amounted to 401,438 and \$5,826,536 respectively. Adjusting these data by the factor of 1.007 (multiplying 401,438 and 5,826,536 by 1.007) equals the adjusted and rounded quantity and value of 404.2 and \$5,867.3 shown in Table 1. For 2000 to 2001, the adjustment factors are: 1.002 for "Architectural coatings," 0.993 for "Product coatings OEM," 1.051 for "Special-purpose coatings," and 1.048 for "Miscellaneous allied paint products." These factors are used because the annual survey panel was selected to measure approximately 95 percent of the total shipments in the paint industry (NAICS 325510 former SIC 2851). The adjustment factors (based on the 2002 Economic Census, Manfacturing Sector's relationships) bring each product class value up to 100 percent. Quarterly data for 2005 and 2004 reflect the adjusted totals in Table 1 and are shown in Table 3 alone with the quarterly data originally published in the Current Industrial Reports quarterly series MQ325F, "Paint, Varnish, and Lacquer."

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2005 and 2004 [Quantity in thousand of gallons. Value in thousand of dollars]

		20	005			2004	
Product code	Product description	Quantity	Value		Quantity		Value
325510	Paint and allied products 1/	1,535,551	19,936,631		1,540,383		19,300,551
3255101	Architectural coatings	807,395	9,060,961		816,668		8,763,513
	Exterior solvent-type	80,161	987,345		80,084		959,857
3255101111	Solvent thinned paints and tinting bases, including barn	22.706	257 400		22.107		240,654
3255101115	and roof paints	23,706	257,408		22,197		240,034
3233101113	exterior-interior floor enamels	15,040	239,126		16,367		243,464
3255101119	Solvent thinned undercoaters and primers	10,159	120,862		10,293		122,244
3255101121	Solvent thinned clear finishes and sealers	5,649	77,582		5,712		73,652
3255101125	Solvent thinned stains, including shingle and shake	15,419	203,923		15,529		199,301
3255101129	Other exterior solvent thinned coatings, including bituminous paints	10,188	88,444		9,986		80,542
	Exterior water-type	199,327	2,328,844		201,600		2,238,371
3255101131	Water thinned paints and tinting bases, including barn		_,,_				_,
	and roof paints	117,927	1,418,266		121,358		1,409,008
3255101135	Water thinned exterior-interior deck and floor enamels	4,101	42,715		3,742		39,247
3255101139	Water thinned undercoaters and primers Water thinned stains and sealers	28,051 22,890	310,902 288,195		27,665 22,305		293,220 266,552
3255101141 3255101145	Other exterior water thinned coatings	26,358	268,766		26,530		230,344
32331011.3	Interior solvent-type	58,827	729,275		64,040		736,543
3255101211	Flat solvent thinned wall paint and tinting bases, including						
	mill white paints	2,623	73,138	r/	2,683		70,830
3255101215	Gloss and quick drying enamels and other gloss solvent	2 777	54.056		2 412		48 620
3255101219	thinned paints and enamelsSemigloss, eggshell, satin solvent thinned paints, and	3,777	54,056		3,413		48,629
3233101213	tinting bases	13,130	183,647		13,813		180,926
3255101221	Solvent thinned undercoaters and primers	22,761	234,292		27,405		262,249
3255101225	Solvent thinned clear finishes and sealers	(D)	(D)		(D)		(D)
3255101229	Solvent thinned stains	1,368	17,578	r/	1,470		18,199
3255101231	Other interior solvent thinned coatings	(D) 460,121	(D) 4,916,755		(D) 462,203		(D) 4,742,695
3255101235	Flat water thinned paints and tinting bases	181,837	1,584,349		181,060		1,549,590
3255101239	Semigloss, eggshell, satin, and other water thinned paints	,	-,,-		,		-,
	and tinting bases	203,305	2,451,007		197,272		2,306,298
3255101241	Water thinned undercoaters and primers	35,537	299,157		45,975		387,292
3255101245 3255101249	Other interior water thinned coatings, stains, and sealers	39,442 6,936	582,242 73,344		37,896 6,301		499,515 63,170
3255101249 3255101YWV	Architectural coatings, n.s.k.	2,023	25,398		2,440	r/	22,877
		·					
3255104	Product finishes for original equipment manufacturers (OEM),		= 0.4. =0.0		401 400		F 000 F00
2255104111	excluding marine coatings	398,673	5,944,726 1,140,024	r/	401,438 55,682	r/	5,826,536 1,133,220
3255104111 3255104121	Automobile, light truck, van, and sport utility vehicle finishes  Automobile parts finishes	54,521 5,959	1,140,024	r/ r/	6,814	r/	201,452
3255104121	Heavy duty truck, bus, and recreational vehicle finishes	7,554	200,291	r/	7,020	r/	177,175
3255104141	Other transportation equipment finishes, including aircraft			•			
	and railroad	9,552	156,077		8,091		131,708
3255104211	Appliance, heating equipment, and air-conditioner finishes	8,255 49,231	94,017 590,472	r/	8,294 44,921	r/	104,749 514,628
3255104215 3255104219	Wood furniture, cabinet, and fixture finishes	11,304	132,197		11,976		126,559
3255104213	Metal building product finishes, including coatings for	11,501	102,131		,		120,000
	aluminum extrusions and siding	32,502	608,627	r/	33,549	r/	644,582
3255104225	Container and closure finishes	35,043	462,090	r/	34,746	r/	439,994
3255104229	Machinery and equipment finishes, including road building	20,229	526,367	r/	20,638		511,396
3255104231	equipment and farm implements Nonwood furniture and fixture finishes, including business	20,229	320,307	1/	20,036		311,390
3233104231	equipment finishes	49,174	525,670		43,807		465,323
3255104235	Paper, paper board, film, and foil finishes, excluding pigment						
	binders	14,752	134,762		15,545		130,679
3255104239	Electrical insulating coatings	423 64,773	14,693 746,175	r/	921 68,831		16,295 834,949
3255104241	Appliance powder coatings 2/	7,905	167,027	r/	8,499		177,088
3255104245	Automotive powder coatings 2/	3,199	66,015	r/	4,093		97,479
3255104249	Architectural powder coatings (such as aluminum						
	extrusions) 2/	1,558	18,145		1,766		20,053
3255104251	Lawn and garden powder coatings 2/	1,557 19,357	29,681 309,712	r/	1,752 19,444		33,129 349,893
3255104255 3255104259	Thermoset functional powder coatings (for pipe, rebar,	15,33/	303,/12	17	17,444		575,055
	electrical insulation, etc.) 2/	(D)	(D)		(D)		(D)

Table 2. Quantity and Value of Shipments of Paint and Allied Products: 2005 and 2004 [Quantity in thousand of gallons. Value in thousand of dollars]

Code	Product	Product Product description		2005			2004				
3255104263   Other powder coatings		Froduct description	Quantity	Value		Quantity		Value			
Product finishes for original equipment manufacturers (OEM), excluding marine coatings, n.s.k.			, ,	•							
Special-purpose coatings, including all marine coatings			34,089	392,444	г/	37,708	r/	365,123			
Industrial new construction and maintenance paints (especially formulated coatings for special conditions of industrial plants and/or facilities requiring protection against extreme temperatures, fungi, chemicals, fumes, etc.):    16,416		excluding marine coatings, n.s.k.	1,312	22,288	r/	2,895	r/	28,704			
3255107115   Exterior	3255107	Industrial new construction and maintenance paints (especially formulated coatings for special conditions of industrial plants and/or facilities requiring protection against extreme tempera-	155,629	3,631,741	r/	154,376		3,522,314			
Traffic marking paints (all types; shelf goods and highway department)	3255107111	Interior	16,416	265,574	r/	14,858	r/	229,391			
department	3255107115	Exterior	30,161	658,463	r/	29,650		618,719			
department	3255107121	Traffic marking paints (all types; shelf goods and highway									
Automotive, other transportation and machinery refinish paints and enamels, including primers.   54,139   2,015,606   55,904   2,034,232			30,799	238,700	r/	29,189	r/	225,934			
paints and enamels, including primers	3255107131				·	ŕ					
Marine paints, ship and off-shore facilities and shelf goods for both new construction and marine refinish and maintenance, excludes spar varnish			54.139	2.015.606		55.904		2.034.232			
Marine paints for yacht and pleasure craft, new construction, refinish, and maintenance	3255107141	Marine paints, ship and off-shore facilities and shelf goods	,					,			
Aerosol-paint concentrates produced for packaging in aerosol containers	3255107151		12,510	253,929		12,342		246,723			
containers		refinish, and maintenance	83	2,077		100		2,238			
containers	3255107161	Aerosol-paint concentrates produced for packaging in aerosol									
325510B Miscellaneous allied paint products			10,298	151,877		11,721		146,196			
325510B111       Paint and varnish removers	3255107YWV	Special-purpose coatings, n.s.k.	1,223	45,515	r/	612	r/	18,881			
325510B111       Paint and varnish removers	325510B	Miscellaneous allied paint products	173,854	1,299,203	r/	167,901		1,188,188			
325510B121       Thinners for lacquers and other solvent based paint products	325510B111		7.373		r/	8,264		58,151			
325510B131 Pigment dispersions	325510B121	Thinners for lacquers and other solvent based paint products	38,481	190,320	r/	40,646		170,752			
Other miscellaneous allied paint products, including brush cleaners, ink vehicles, putty and glazing compounds, etc			•	•	•	•		•			
cleaners, ink vehicles, putty and glazing compounds, etc			•	•				•			
			93,102	525,444	r/	87,258		476,914			
	325510BYWV		•	22,754	•	420		24,008			

D Withheld to avoid disclosing data for individual companies; data are included in higher level totals. n.s.k. Not specified by kind. r/Revised by 5 percent or more from previously published data.

<sup>1/</sup>Represents total shipments for those establishments producing paint and allied products that have 20 or more employees. These establishments represent approximately 95 percent of the total value of shipments for NAICS industry 325510, Paint, varnishes, lacquers, enamels, and allied products, based on relationships observed in the 2002 Economic Census, Manufacturing sector's final report.

<sup>2/</sup>Data for powder coatings are collected in pounds and converted to gallons by using a conversion factor of 5 (5 lbs. = 1 gallon). Data collected in pounds amounted to 323,865 thousand pounds in 2005 and 344,155 thousand pounds in 2004.

Table 3. Quantity and Value of Shipments of Paint, Varnish, and Lacquer by Quarter: 2005 and 2004 [Quantity in thousands of gallons. Value in thousands of dollars]

### As revised

Quarter and year	uarter and year Total		Archite coati		Product OE		Special-purpose coatings		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
2005									
Total	1,351,724	18,537,698	794,476	8,915,986	401,463	5,986,339	155,785	3,635,373	
Fourth quarter Third quarter Second quarter First quarter	306,998 357,356 387,991 299,379	4,249,537 4,951,652 5,274,808 4,061,701	174,237 212,485 233,500 174,254	1,938,121 2,392,741 2,658,601 1,926,523	98,687 101,740 107,094 93,942	1,484,522 1,562,654 1,578,439 1,360,724	34,074 43,131 47,397 31,183	826,894 996,257 1,037,768 774,454	
2004		•							
Total	1,362,380	18,016,455	803,602	8,623,297	404,247	5,867,321	154,531	3,525,837	
Fourth quarter Third quarter Second quarter First quarter	304,549 361,253 376,317 320,261	4,053,376 4,780,154 4,932,627 4,250,298	177,955 217,017 223,729 184,901	1,929,415 2,352,945 2,376,712 1,964,225	95,157 102,320 104,409 102,361	1,396,407 1,469,902 1,515,363 1,485,649	31,437 41,916 48,179 32,999	727,554 957,307 1,040,552 800,424	
				As publ	ished				
Quarter and year	Total		Architectural coatings		Product coatings OEM		Special-purpose coatings		
	Quantity	Value	Quantity	Value	Quantity	. Value	Quantity	Value	
2005									
Total	1,445,125	19,472,717	857,673	9,291,411	413,121	6,465,174	174,331	3,716,132	
Fourth quarter Third quarter Second quarter First quarter	327,780 382,347 415,318 319,680	4,468,258 5,199,529 5,536,064 4,268,866	188,097 229,387 252,074 188,115	2,019,729 2,493,492 2,770,547 2,007,643	101,553 104,694 110,204 96,670	1,603,266 1,687,648 1,704,695 1,469,565	38,130 48,266 53,040 34,895	845,263 1,018,389 1,060,822 791,658	
2004									
Total	1,410,076	18,253,979	809,031	8,627,816	427,785	5,937,223	173,260	3,688,940	
Fourth quarter Third quarter Second quarter First quarter	315,102 373,757 389,747 331,470	4,104,679 4,843,184 5,000,062 4,306,054	179,157 218,483 225,241 186,150	1,930,426 2,354,178 2,377,958 1,965,254	100,698 108,278 110,488 108,321	1,413,043 1,487,414 1,533,417 1,503,349	35,247 46,996 54,018 36,999	761,210 1,001,592 1,088,687 837,451	

See note at end of Table 1.

Table 4. Shipments, Exports, Imports, and Apparent Consumption of Selected Paints: 2005 and 2004 [Quantity in millions of gallons. Value in millions of dollars]

Product Product description code		Manufactures' shipments		Exports of domestic merchandise 1/		Percent exports to manfactures' shipments		Imports for consumption 2/		Apparent consumption 4/	
couc		Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value 3/	Quantity	Value
3255101100, 4100, 7100	Paint, varnish, and lacquer 2005 2004		18,537.7 18,016.5	(NA) (NA)	1,338.1 1,209.1	(NA) (NA)	7.4 7.1	(NA) (NA)	547.2 499.0	(NA) (NA)	17,225.6 16,206.5
325510B111, B121	Paint and varnish removers , including thinners2005 2004 r	45.9 / 48.9	243.3 228.9	(NA) (NA)	89.3 77.3	(NA) (NA)	36.7 33.8	(NA) (NA)	21.2 20.1	(NA) (NA)	175.2 171.7
325510B141	Other miscellaneous allied paint products	93.1	525.4 476.9	(NA) (NA)	176.7 154.4	(NA) (NA)	33.6 32.4	(NA) (NA)	85.6 80.3	(NA) (NA)	434.3 402.8

NA Not available. r/Revised by 5 percent or more from previously published data.

<sup>1/</sup>Source: Census Bureau report EM 545, U. S. Exports.
2/Source: Census Bureau report IM 145, U. S. Imports for Consumption.
3/Dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.
4/Apparent consumption is equal to domestic shipments, plus imports, minus exports.

Table 5. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes and HTSUSA Import Codes: 2005

Product code	Product description	Export code 1/	Import code 2/
3255101100, 4100, 7100	Paint, varnish, and lacquers	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000	3208.10.0000 3208.20.0000 3208.90.0000 3209.10.0000 3209.90.0000
325510B111, B121	Paint and varnish removers, including thinners	3814.00.0000	3814.00.1000 3814.00.2000 3814.00.5010 3814.00.5090
325510B141	Other miscellaneous allied paint products	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090	3210.00.0000 3211.00.0000 3214.10.0020 3214.10.0090

1/Source: 2005 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/Source: Harmonized Tariff Schedule of the United States, Annotated (2005).

### Appendix.

# General CIR Survey Information, Explanation of General Terms and Historical Note

### **GENERAL**

The CIR program has been providing monthly, quarterly, and annual measures of industrial activity for many years. Since 1904, with its cotton and fats and oils surveys, the CIR program has formed an essential part of an integrated statistical system involving the quinquennial economic census, manufacturing sector, and the annual survey of manufactures. The CIR surveys, however, provide current statistics at a more detailed product level than either of the other two statistical programs.

The primary objective of the CIR program is to produce timely, accurate data on production and shipments of selected products. The data are used to satisfy economic policy needs and for market analysis, forecasting, and decision making in the private sector. The product-level data generated by these surveys are used extensively by individual firms, trade associations, and market analysts in planning or recommending marketing and legislative strategies, particularly if their industry is significantly affected by foreign trade. Although production and shipments information are the two most common data items collected, the CIR program collects other measures also such as inventories, orders, and consumption. These surveys measure manufacturing activity in important commodity areas such as textiles and apparel, chemicals, primary metals, computer and electronic components, industrial equipment, aerospace equipment, and consumer goods.

The CIR program uses a unified data collection, processing, and publication system. The U.S. Census Bureau updates the survey panels for most reports annually and reconciles the estimates to the results of the broader-based annual survey of manufactures and the economic census, manufacturing sector. The manufacturing sector provides a complete list of all producers of the products covered by the CIR program and serves as the primary source for CIR sampling. Where a small number of producers exist, CIR surveys cover all known producers of a product. However, when the number of producers is too large, cutoff and random sampling techniques are used. Surveys are continually reviewed and modified to provide the most up-to-date information on products produced. The CIR program includes a group of mandatory and voluntary surveys. Typically the monthly and quarterly surveys are conducted on a voluntary basis. Those companies that choose not to respond to the voluntary surveys are required to submit a mandatory annual counterpart corresponding to the more frequent survey.

# NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS), 1997

The adoption of the North American Industry Classification System (NAICS) in the 1997 Economic Census has had a major impact on the comparability of current and historic data. Approximately half of the industries in the manufacturing sector of NAICS do not have comparable industries in the Standard Industrial Classification (SIC) system that was used in the past.

While most of the change affecting the manufacturing sector was change within the sector, some industries left manufacturing and others came into manufacturing. Prominent among those that left manufacturing are logging and portions of publishing. Prominent among the industries that came into the manufacturing sector are bakeries, candy stores where candy is made on the premises, custom tailors, makers of custom draperies, and tire retreading. The net effect of the classification changes are such that if the 1997 value of shipments data for all manufacturers were tabulated on an SIC basis, it would be approximately 3 percent higher.

Listed below are the NAICS sectors:

- 21 Mining
- 22 Utilities
- 23 Construction
- 31-33 Manufacturing
- 42 Wholesale Trade
- 44-45 Retail Trade
- 48-49 Transportation and Warehousing
- 51 Information
- 52 Finance and Insurance
- 53 Real Estate and Rental and Leasing
- 54 Professional, Scientific, and Technical Services
- 55 Management of Companies and Enterprises
- 56 Administrative and Support and Waste Management and Remediation Services
- 61 Educational Services
- 62 Health Care and Social Assistance
- 71 Arts, Entertainment, and Recreation
- 72 Accommodation and Foodservices
- 81 Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 96 subsectors (three-digit codes), 313 industry groups (four-digit codes), and, as implemented in the United States, 1170 industries (five- and six-digit codes).

### **FUNDING**

The Census Bureau funds most of the surveys. However, a number of surveys are paid for either fully or partially by other Federal Government agencies or private trade associations. A few surveys are mandated, but all are authorized by Title 13 of the United States Code.

### **RELIABILITY OF DATA**

Survey error may result from several sources including the inability to obtain information about all cases in the survey, response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding the reported data, and other errors of collection, response, coverage, and estimation. These nonsampling errors also occur in complete censuses. Although no direct measurement of the biases due to these nonsampling errors has been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize their influence.

A major source of bias in the published estimates is the imputing of data for nonrespondents, for late reporters, and for data that fail logic edits. Missing figures are imputed based on period-to-period movements shown by reporting firms. A figure is considered to be an impute if the value was not directly reported on the questionnaire, directly derived from other reported items, directly available from supplemental sources, or obtained from the respondent during the analytical review phase. Imputation generally is limited to a maximum of 10 percent for any one data cell. Figures with imputation rates greater than 10 percent are suppressed or footnoted. The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, because the actual yearly movements for nonrespondents may or may not closely agree with the imputed movements. The range of difference between the actual and imputed figures is assumed to be small. The degree of uncertainty regarding the accuracy of the published data increases as the percentage of imputation increases. Figures with imputation rates above 10 percent should be used with caution.

### **DATA REVISIONS**

Statistics for previous years may be revised as the result of corrected figures from respondents, late reports for which imputations were originally made, or other corrections. Data that have been revised by more than 5 percent from previously published data are indicated by footnotes.

### **DISCLOSURE**

The Census Bureau collects the CIR data under the authority of Title 13, United States Code, which specifies that the information can only be used for statistical purposes and cannot be published or released in any manner that would identify a person, household, or establishment. "D" indicates that data in the cell have been suppressed to avoid disclosure of information pertaining to individual companies.

### **EXPLANATION OF GENERAL TERMS**

Capacity. The maximum quantity of a product that can be produced in a plant in 1 day if operating for 24 hours. Includes the capacity of idle plants until the plant is reported to be destroyed, dismantled, or abandoned.

**Consumption.** Materials used in producing or processing a product or otherwise removing the product from the inventory.

**Exports.** Includes all types of products shipped to foreign countries, or to agents or exporters for reshipment to foreign countries.

Gross shipments. The quantity or value of physical shipments from domestic establishments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale or use. Shipments of products purchased for resale are omitted. Shipments of products made under toll arrangements are included.

Interplant transfers. Shipments to other domestic plants within a company for further assembly, fabrication, or manufacture.

Inventories. The quantity or value of finished goods, work in progress, and materials on hand.

Machinery in place. The number of machines of a particular type in place as of a particular date whether the machinery was used for production, prototype, or sampling, or was idle. Machinery in place includes all machinery set up in operating positions.

**Net receipts.** Derived by subtracting the materials held at the end of the previous month from the sum of materials used during the current month.

**Production.** The total volume of products produced, including: products sold; products transferred or added to inventory after adjustments for breakage, shrinkage, and obsolescence, plus any other inventory adjustment; and products that undergo further manufacture at the same establishment.

Quantities produced and consumed. Quantities of each type of product produced by a company for internal consumption within that same company.

Quantity and value of new orders. The sales value of orders received during the current reporting period for products and services to be delivered immediately or at some future date. Also represents the net sales value of contract change documents that increase or decrease the sales value of the orders to which they are related, when the parties concerned are in substantial agreement as to the amount involved. Included as orders are only those that are supported by binding legal documents such as signed contracts or letter contracts.

Quantity and value of shipments. The figures on quantity and value of shipments represent physical shipments of all products sold, transferred to other establishments of the same company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges, and returns. Shipments to a company's own branches are assigned the same value as comparable appropriate allocation of company overhead and profit. Products bought and resold without further manufacture are excluded.

Stocks. Total quantity of ending finished inventory.

**Unfilled orders (backlog).** Calculated by adding net new orders and subtracting net sales from the backlog at the end of the preceding year.

### HISTORICAL NOTE

Data on paint, varnish, and lacquer have been collected by the Census Bureau since 1928. Prior to 1981, a monthly sample survey, benchmarked to the census of manufactures, was used to collect these data. Beginning with data year 1981, an annual survey on paint and related products was added. The monthly survey was still conducted through 1990. Beginning in 1991, due to budget reductions, the monthly series was canceled and replaced with a similar quarterly series.

Historical data may be obtained from Current Industrial Reports (called Facts for Industry before 1959) available at your local Federal Depository Library.

Exhibit 6: Advertising and sales aids expenses, Textured Coatings of America, Inc., 2000-2006.

Textured Coatings of America, inc. Advertising Cost Analysis 2000 - 2006

Advertising - General         PROJECTED 2006 2005 2004 2003 2002 2001 3,168.00         2004 21,151.24 13,507.87         2003 3,863.65 3,863.65         2001 3,863.65 3,863.65         -           General Advertising - Commercial         11,283.56 15,509.81 12,471.31 16,495.92 17,779.47 35,166.63         35,166.63           General Advertising - Home Imp.         11,283.56 15,509.79 12,338.81 18,491.95 41,234.39 32,519.40         32,519.40           Total General Advertising         23,735.12 31,019.60 45,961.36 48,495.74 62,877.51 67,686.03         67,686.03           Sales Alds - General         41,328.94 16,960.94 27,510.43 11,259.80 14,069.36 1,274.00	2000
Advertising - General       1,168.00       -       21,151.24       13,507.87       3,863.65       -         General Advertising - Commercial       11,283.56       15,509.81       12,471.31       16,495.92       17,779.47       35,166.63         General Advertising - Home Imp.       11,283.56       15,509.79       12,338.81       18,491.95       41,234.39       32,519.40         Total General Advertising       23,735.12       31,019.60       45,961.36       48,495.74       62,877.51       67,686.03	
General Advertising - Home Imp.         11,283.56         15,509.79         12,338.81         18,491.95         41,234.39         32,519.40           Total General Advertising         23,735.12         31,019.60         45,961.36         48,495.74         62,877.51         67,686.03	9,846.55
Total General Advertising 23,735.12 31,019.60 45,961.36 48,495.74 62,877.51 67,686.03	40,486.66
	38,963.06
Sales Aids - General         41,328.94         16,960.94         27,510.43         11,259.80         14,069.36         1,274.00	89,296.27
	-
Sales Aids Commercial         92,556.56         76,114.84         .98,346.99         76,490.10         30,956.61         46,122.50	28,181.55
Sales Aids - Home Improvement         58,058.78         65,709.04         166,478.51         122,615.13         83,827.06         81,891.25	80,555.02
Total Sales Aids 191,944.28 158,784.82 292,335.93 210,365.03 128,853.03 129,287.75	108,736.57
Total Advertising and Sales Aids 215,679.40 189,804.42 338,297.29 258,860.77 191,730.54 196,973.78	198,032.84